

CLAIM AMENDMENTS

Please cancel claims 1-20, 23, 30 without prejudice and consider the following amendments to claims 21 and 29.

1. (cancelled).
2. (cancelled).
3. (cancelled).
4. (cancelled).
5. (cancelled).
6. (cancelled).
7. (cancelled).
8. (cancelled).
9. (cancelled).
10. (cancelled).
11. (cancelled).
12. (cancelled).
13. (cancelled).
14. (cancelled).
15. (cancelled).
16. (cancelled).
17. (cancelled).
18. (cancelled).
19. (cancelled).

20.(cancelled).

21.(cancelled).

22.(cancelled).

23.(cancelled).

24.(cancelled).

25.(cancelled).

26.(cancelled).

27.(cancelled).

28.(cancelled).

29.(cancelled).

30.(cancelled).

31.(cancelled).

32.(cancelled).

33.(cancelled).

34.(cancelled).

35.(cancelled).

36.(new) A method for treating wastewater comprising the steps of:

- a) providing a treatment system comprising: a solids separation tank; an oxidation tank comprising a plurality of chambers including an inlet chamber operatively connected to said solids separation tank and an outlet chamber from which liquid exits from said oxidation tank; and, a liquid flow circuit whereby liquid flows from said solids separation tank into said oxidation tank, out of said oxidation tank and is reintroduced into said solids separation tank and said oxidation tank;
- b) dissolving a gas comprising ozone into said liquid in said liquid flow circuit after said liquid exits from said oxidation tank;

- c) introducing wastewater to be treated into said solids separation tank;
- d) separating solids from liquid in said wastewater in said solids separation tank;
- e) allowing said liquid from said solids separation tank to pass into said oxidation tank;
- f) introducing said liquid with dissolved gas comprising ozone into said liquid in said oxidation tank and allowing said gas comprising ozone to form bubbles in said liquid in said oxidation tank and cause oxidation of substances in said liquid in said oxidation tank;
- g) introducing said dissolved gas comprising ozone into each of said chambers and allowing said liquid to flow from said inlet chamber, through any intermediate chambers and into said outlet chamber; and,
- h) removing treated liquid from said treatment system for discharge to the environment.

37.(new) A method according to claim 36 wherein said step of separating solids from liquid comprises introducing said liquid with dissolved gas comprising ozone into said solids separation tank and allowing said dissolved gas comprising ozone introduced into said solids separation tank to form bubbles in said wastewater, thereby effecting separation of said solids in said wastewater by flotation and causing oxidation of substances in said wastewater.

38.(new) A method according to claim 36 wherein step (f) comprises directing said liquid with dissolved gas comprising ozone through an orifice in a plate and against a baffle plate spaced from said orifice.

39.(new) A method according to claim 36 further comprising the step of removing any excess ozone from said treatment system.

40.(new) A method according to claim 36 further comprising the step of producing said gas comprising ozone.

41.(new) A method according to claim 36 further comprising the step of periodically removing said separated solids from said solids separation tank.

42.(new) A method according to claim 36 further comprising the step of irradiating at least part of said liquid with said dissolved gas comprising ozone with ultraviolet light to produce hydroxyl radicals.

43.(new) A method for treating wastewater comprising the steps of:

- a) providing a treatment system comprising: a solids separation tank; an oxidation tank comprising a plurality of chambers including an inlet chamber operatively connected to said solids separation tank and an outlet chamber from which liquid exits from said oxidation tank; and, a liquid flow circuit whereby liquid flows from said solids separation tank into said oxidation tank, out of said oxidation tank and is reintroduced into said oxidation tank;
- b) dissolving a gas comprising ozone into said liquid in said liquid flow circuit after said liquid exits from said oxidation tank;
- c) introducing wastewater to be treated into said solids separation tank;
- d) separating solids from liquid in said wastewater in said solids separation tank by means of gas flotation;
- e) allowing said liquid from said solids separation tank to pass into said oxidation tank;
- f) introducing said liquid, with dissolved gas comprising ozone into said liquid in said oxidation tank and allowing said gas comprising ozone to form bubbles in said liquid in said oxidation tank and cause oxidation of substances in said liquid in said oxidation tank;
- g) introducing said dissolved gas comprising ozone into each of said chambers and allowing said liquid to flow from said inlet chamber, through any intermediate chambers and into said outlet chamber; and,
- h) removing treated liquid from said treatment system for discharge to the environment.

- 44.(new) A method according to claim 43 wherein step (f) comprises directing said liquid with dissolved gas comprising ozone through an orifice in a plate and against a baffle plate spaced from said orifice.
- 45.(new) A method according to claim 43 further comprising the step of removing any excess ozone from said treatment system.
- 46.(new) A method according to claim 43 further comprising the step of producing said gas comprising ozone.
- 47.(new) A method according to claim 43 further comprising the step of periodically removing said separated solids from said solids separation tank.
- 48.(new) A method according to claim 43 further comprising the step of irradiating at least part of said liquid with said dissolved gas comprising ozone with ultraviolet light to produce hydroxyl radicals.